

King Fahd University of Petroleum and Minerals
Department of Mathematics and Statistics
Math 201 – Term 182 – Quiz 4

Name:

Student ID #:

Section #: 4

Question 1. Find the linearization of the function $f(x, y) = e^{2y-x}$ at $(2, 1)$ and use it to approximate $f(1.95, 1.05)$

Question 2. Find the directional derivative of $f(x, y, z) = xy^3z^2$ at the point $P(1, 1, 1)$ in the direction from P to $Q(2, -1, 3)$.